

Re:Port

Vol. 2, Issue 5

The Independent Newsletter for Portfolio Users

July/Aug., 1993

PBASE brings database to Port

Billed as the world's smallest database, PBASE version 2.0 from Autobyte software is just the program that many users have been waiting for.

If you have no experience with traditional databases such as dBase, Paradox, or FoxPro, then you may want to choose HyperList from Atari for your database needs.

However, if you are familiar with (or currently using) those programs, try PBASE for your Portfolio.

The new version, 2.0, can even import and export data in the form of comma-separated values.

If your program can send data to a file in that format, you can upload it into PBASE.

If your program can read CSV format files, it can download from PBASE.

The program comes with a clearly written 55-page manual that is sometimes a bit too glib, but otherwise gets the job done.

Perhaps the worst thing about the world's smallest database is that it comes on the world's biggest ROM card.

The ROM card has a module on it that extends a full inch from the edge of the Portfolio, which can be a defi-

Re:Port subscribers can get PBASE for lower than the original dealer price!

To find out how, see "Good Buys on Autobyte Software" in the Industry News column on Page 3.

nite nuisance.

PBASE users with a 128K card and a PC Card Drive will want to check Volume 2, Issue 2 of Re:Port for the CREAD and CWRITE programs.

Using those, you can copy the program (and its copy protection) from the ROM card onto your RAM card.

This will make life with PBASE much easier.

However, this copy is only for personal use; it is unlawful to sell a CREAD copy of commercial software.

That aside, PBASE is a very useable database.

It has only two flaws as far as software goes:

Continued on Page 8

What's Inside

♦ Sorry we're late!
You will not miss an issue. For the whole story, see inside.

Page 2

♦ BJ Gleason explains how to read worksheet data into your PBASIC programs.

Page 4

♦ Add the ability to format text with SuperPrint, our incredible printer driver.

Page 5

♦ Play the Peg Game and win a serial interface.

Pages 6, 11

♦ Create context-sensitive help.

Page 10

♦ Beginner's column, contest winner, and more are all ...

Inside

From the Editor

Re:Port delayed after move to Atlanta, GA

Sorry we're late.

As you no doubt have noticed, Re:Port didn't make it to your mailbox on May 1 as it should have.

Do not worry, though -- you will still receive six issues for a full subscription. We hope you'll forgive our tardiness and keep on subscribing.

The reason Re:Port is so late is that editor David E. Stewart has moved to Atlanta, Georgia, in order to take a programming job with Inventory Xpress, Inc.

Inventory Xpress is a restaurant inventory control company that does something interesting to anyone reading this newsletter: It uses the Portfolio in all phases of the inventory.

Inventory Xpress decided to use the Portfolio because of its size, price, and ruggedness.

Restaurants can be a hostile environment, but the Portfolio is able to handle much of the strain.

When it can't, Atari's aggressive returns policy allows the company to offer an incredible deal -- the restaurant can get a new computer for less than a twentieth of the cost of the entire system.

That doesn't happen often, because the Portfolio can go anywhere.

It ventures into the freezer, gets set down next to ovens, has sugar poured on its keys, and even gets wet. It is still able to deliver an accurate inventory count.

The low price of the Portfolio makes it an attractive piece of the puzzle as well.

The complete systems, hardware and software, range in price from

\$700 to \$2000, which makes even the most expensive Inventory Xpress package more affordable than the just base hardware of many competing systems.

Inventory Xpress, along with other vertical market companies, may help guarantee that Atari will keep up with the Portfolio rather than let it fall to the side.

It is disappointing that machines with flawed designs (such as the new HP 100LX's terrible screen and keyboard) are able to take over the consumer market.

You can take some pride that the Atari Portfolio has made it this far.

A handheld designed by the same company, DIP of England, has been discontinued in the United States.

The Sharp PC3000 is only an inch longer than the Port and has 640K, an 80-by-25 screen, and two PCMCIA card slots.

That may sound like a dream wish list for the Portfolio, but it failed. Why? Because it is so compatible with the DOS world that there was really no reason to write programs specifically for it. All it has to make it unique is its size, which isn't enough.

The Portfolio, and also the HP, have survived partly because dedicated people write software to run just on those machines.

Vertical market companies will help consumers by ensuring that there is always hardware available to buy straight from some source. Which brings us back to Re:Port, at last!

Re:Port hasn't died, it just got sidelined as we made the transition

from Iowa to Georgia.

We've been filling orders and gathering new subscribers almost non-stop (in fact, a recent direct mailing to new Portfolio owners was one of our most successful to date).

This shows that interest in the Portfolio is still high.

Re:Port is, as always, available to help you with your Portfolio problems. The new address to write is:

Re:Port

P.O. Box 95691

Atlanta, GA 30347

The new phone number is 1-404-908-9262.

The best times to call are between 7 p.m. and 11 p.m. Eastern Time, but we periodically check the answering machine during the day and will return calls as soon as possible.

Please enjoy this issue and let us know what you think of it.

Your feedback counts, especially for the Beginners and Advanced columns, where we like to respond directly to what readers need to know to make their lives with the Portfolio more productive.

You may notice some differences in this issue. Some of the typefaces used to make up Re:Port are a bit different.

The change was necessary to accommodate our new printer and software (an HP LaserJet IIIP with Windows Printer System software).

However, our commitment to the Portfolio and its users has not changed. Call on us if you need any help with information presented in Re:Port or related in any way to the Atari Portfolio.

Industry News

Atari & IBM? No direct effect on the Port ...

Perhaps the biggest recent news involving Atari recently is that IBM will be manufacturing Atari's new game machine, the Jaguar.

Although this won't have a direct effect on the Portfolio, it certainly couldn't hurt if Atari were bolstered by success in the game industry again.

IBM's involvement does not mean that any PC hardware will be involved. The computer giant is simply contracting out its capable manufacturing processes to help Atari meet what we hope will be a huge demand for the Jaguar.

Look for the Jaguar for around \$200 in New York and San Francisco by the end of 1993. It should spread to the rest of the world during 1994.

SPEAKING OF THE PC

A new book called "PC for Dummies" is available that mentions the Atari Portfolio. One of the co-authors is a Portfolio user and frequents the CompuServe forum devoted to the Port. If you want to find out more about the PC but aren't up to reading technical journals, try this book, which takes a humorous approach to teaching about the computer.

LARGER, CHEAPER RAM CARDS?

Up till now, Atari has been the only source for "Bee Cards," which is the actual name of our 64K and 128K RAM cards. But now, another source is emerging. Mitsui Plastics, associated with Mitsubishi, the original designers of the Bee Card, is beginning to offer the cards directly to dealers. This could push the price down on RAM cards by keeping supply higher.

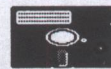
Mitsui Plastics is also considering the possibility of creating higher-capacity RAM cards, as well as cards that mix RAM and ROM. A mixture card could be good for programs such as Hyperlist, which currently is on a ROM-only card. You could store the actual program in ROM while allowing the user to store data in RAM on the same card.

Of course, Re:Port will keep you abreast of current developments in this area.

OPTROL UPDATES SOFTWARE

Meanwhile, the best source for larger cards is Optrol. Their 524K cards are available from Re:Port for \$180 to subscribers.

The company that created the software to drive the cards, SDRFT of North Carolina, has released updated



drivers which are included on all cards from now on. If you purchased a card previously, **ON DISK** you may copy the software from the OPTROL directory on Re:Port disk #11. This set of software should go onto your A: drive using the MAKEBOOT utility.

The new software cleans up the old version and makes it more difficult to accidentally erase your A: drive with MAKEBOOT.

GOOD BUYS ON AUTOBYTE SOFTWARE

Re:Port has found a source for Autobyte software. Autobyte created several Portfolio-specific programs, including PBASE (see review, Page 1), Fast Pay, Checkwriter, Timekeeper, Terminal, and Stocks. Besides Stocks, which is a game, all of the programs are handy for Portfolio business users.

The source is Crescendo Associates of Florida. Contact them for current prices and availability. Their prices are lower than the original dealer cost, so you can't go wrong. Call 1-305-922-9553 and ask for Dawn, or write to Crescendo Associates, ATTN: Dawn, 2632 Hollywood Blvd., Ste 307, Hollywood, FL 33020.

PORT OSCILLOSCOPE

Turn your Port into an oscilloscope! If you've ever needed to do so, a German company has the answer: The Osziilloscope.

The "Oszi" comes in two versions: a bigger model that uses its own batteries, and a smaller version that draws power from the Port. Which you'd use depends on how portable you need the unit to be. The company also sells a highly programmable I/O interface for the Portfolio that is necessary to run the Oszi.

For more information on this neat device, contact WHS Electronic, Dipl.-Ing. Hans-Peter Zaengerl, Breslauer Strasse 7, W-8300-Landshut, Germany.

Reach Port owners with an entry in Industry News! Send your press release to:

Re:Port Industry News
P.O. Box 95691
Atlanta, GA 30347

PBASIC

How to read .WKS from a PBASIC program

©1993 BJ Gleason

One of the nice things about writing your own language is that you can add whatever features you want to it.

When I was writing PBASIC, I wanted to integrate it very closely to the internal applications of the Portfolio.

This was relatively easy, since most of the applications used ASCII text files. The only one that didn't was the worksheet.

Since the worksheet file was a standard Lotus 1-2-3 compatible .WKS file, I was able to find out the data format and create a way to read data from the worksheet file into a PBASIC program.

WKSREAD, WKSREAD\$ and WKSTYPE are all you need to start importing data to your own programs.

The question that always comes up, however, is what can't I write to a WKS file?

Well, writing/appending/modifying WKS files is amazing complex, and would require much more space than reading the data. I didn't feel that the features were worth the size required to implement them.

WKSREAD will read a numeric value from a worksheet (.WKS) file. For example:

```
v = WKSREAD(filename, row, col)
```

This will read a numeric value from row, col in a .WKS file called filename. Row and col both start at 0, indicating cell A1.

While this method is not very intuitive, it is the way the data is stored in the file.

Example:

```
a = WKSREAD("carloan",3,5)
```

Opens CARLOAN.WKS and reads the value at cell F4.

WKSREAD\$ will read a string from a worksheet (.WKS) file.

For example:

```
v = WKSREAD$(filename, row, col)
```

This works the same as WKSREAD, except that it reads a string from the file.

How can you determine if a cell contains a string or a numbers?

WKSTYPE will determine the type of a cell in a worksheet (.WKS) file. For example:

```
v = WKSTYPE(filename, row, col)
```



Gleason on PBASIC

PBASIC can be found on Re:Port Disk #11 in the \PBASIC subdirectory.

This will return the type of a cell at row, col in a .WKS file called filename.

The types are:

- | | | |
|----|-----------------------|--------------------|
| 1 | EOF | Cell doesn't exist |
| 12 | Blank Cell | |
| 13 | Integer Value | |
| 14 | Real Value | |
| 15 | Label (String) | |
| 16 | Formula Result (Real) | |

Here is a routine that will read and print a cell, regardless of the content:

REM Subroutine Print Cell Contents

REM ROW, COL contain row and column location

REM FILE\$ contains the file name

1000 ty = WKSTYPE(file\$,row,col)

if ty = 1 or ty = 12 then print "EOF":return

if ty = 15 then print WKSREAD\$(file\$,row,col):return

print WKSREAD(file\$,row,col):return

Here is a full blown program that will graph a column of data from a spreadsheet, and will save the graph as a

Continued on Page 7

About the Author

Mr. BJ Gleason is an instructor at The American University in the Computer Science and Information Systems Department. He has been programming for more than a decade and is the author of PBASIC.

You can write to him at:

BJ Gleason

The American University

CSIS (Thin Air Labs)

4400 Massachusetts Avenue, N.W.

Washington, DC 20016

CompuServe : 75300,2517

EMAIL : bjgleas@auvm.american.edu

Featured program

Super Print adds formatting ability to Editor

One problem with the Port's built-in Editor is that you can't print underline, or change fonts, or use bold type.

But the best thing about the Editor is that you can fix problems like that. Super Print is the solution.

Using Super Print, you can create a letter using the Port's Editor that looks more like it came from a desktop PC.

If your printer can handle it, you can change fonts and font sizes, add italics and underlines, and print in bold. You may not ever need to print from your desktop again!

However, if you do decide to print from your desktop, Super Print codes can easily be eliminated with a simple search and replace procedure in any word processor.

Super Print is a hook file (.HOO) that will allow you to embed up to 10 different printer codes to control your printer's abilities.

To install Super Print, copy SPRINT.HOO and PRINTER.SET onto the A: drive.

Hook programs will only work from the root directory of the A: drive.

If you are not familiar with hook programs, see the sidebar "Making Hooks Work." on Page 12.

To print normally from the Editor, you would hit Atari-F-P for File, Print.

To print using Super Print, press Fn-6 and hit enter on SPRINT.HOO.

If you do not embed codes into your Editor file, then there will be no difference whether you use Super Print or not (although you may get



Super Print is called SPRINT.HOO on Re:Port Disk #11 under the SPRINT subdirectory.

back into the program slightly faster depending on what sort of printer you are using).

First, let's talk about what embedded codes do.

Embedded codes are special commands that tell your printer to change fonts, or to use italics.

Sometimes, these codes are called escape sequences, because they usually begin with the ASCII escape character (#27) and are followed by a string of other codes. The escape character tells your printer that the codes that follow are not to be printed. Instead, those numbers tell the printer to execute an internal command.

To embed a code into your Editor file so that Super Print can print it, all you need to do is type a "pipe" character, which looks like an elongated colon. It is the shifted backslash key (next to the left shift key).

Follow the pipe with the letter that represents the code you wish to embed. For example: "uThis is underlined." would print like this: This is underlined.

To reset a code back to normal, just insert it again.

For example: "uThis is underlined.u But this is not." would print like this: This is underlined. But this is not.

The key to all of this is the file PRINTER.SET. You will need to

define your embedded codes (up to 10 of them) in this file.

The file provided on disk will work with any Hewlett Packard printer with PCL. You will have to modify this file to work with your own printer, or contact Re:Port for a custom file.

If you wish to have Re:Port create the custom file for you, send your printer's documentation and a list of the features you would like to be able to select, along with \$20 to: Re:Port, ATTN: Printer Codes, PO Box 95691, Atlanta, GA 30347.

However, it is quite simple to define your own codes.

You can edit PRINTER.SET with any ASCII editor (of course, the built-in Editor will work very well).

Each entry consists of three lines: The letter that activates or deactivates the code, followed by the code to turn on the feature, and then the code to turn off the feature.

You may enter codes to insert in three ways.

1. You may enter it as all numbers. For example, 27 45 10 would send those characters to the printer.

2. You may enter it as a combination of numbers and strings of characters. For example, 27 Hello would send "escapeHello" to your printer.

3. You may enter the code as all characters. For example, RE:PORT NEWSLETTER.

This is handy for inserting "macros" into your text. You could assign that text to |r, and placing |r into your file would cause RE:PORT NEWSLETTER to print. Of course,

Continued on Page 6

Game

Peg Game challenges logic, offers prize

Here's a simple but addictive logic game for the Port: Pegs.

To install the game on your machine, transfer PEG.EXE to the Port. Type PEG <enter> to begin.

The game is played on a triangular board. Your pegs are represented by asterisks.

The object is to eliminate as many pegs as possible from the board. If you end up with one peg, you achieve genius status!

To move the pegs, press the letter to the right of the peg that you wish to move, then press the letter of the space to which you want to move the peg.

You must "jump" over another peg on your way, and the final resting space must be empty. The peg that you jump will be cleared from the board.

The playing field begins with all of the spaces except the one in the middle (position "E") filled with pegs.

To get you started, you can move either the peg from L or N to the blank space. From there, you can choose several paths that may lead to a genius score.

When you think you've gone as far as you can, press escape to see your score.

At this time, you will have the opportunity to start again or exit to DOS. Press Y to play again, or N to stop.

Good luck! The game may seem easy at first, but unless you plan ahead, you'll find that ending up with only one peg left is next to impossible.

If you do end up with just one peg left, you will receive



The Peg Game is called PEG.EXE on Re:Port Disk #11 in the \PEG subdirectory.

The Peg Game (c)1993 Re:Port

Move from:

***A**

to:

***B*C**

***D E*F**

Press <esc>

***G*H*I*J**

to give up

***K*L*M*N*O**

a code word. Write this code down immediately, and send it in to Re:Port. You'll be registered to win a serial interface (see Page 11).

Some tips that may help:

First and foremost, *plan ahead*. Don't just jump over pegs blindly. Develop a plan for what will happen two or three moves down the road.

Don't strand a peg in the corner. If you keep a peg in the corner long enough, it will get stuck there.

Keep moving in toward the same direction. This is just one strategy for winning. Move all your pegs in the same direction as much as possible to keep them grouped and to avoid stranding a peg in a corner.

Super Print

Continued from Page 5

doing so could possibly wreak havoc on your margins, so try to keep this sort of trick to a minimum.

Be sure you have three lines in each code definition.

If you do not need to enter a "reset" code to turn off the feature, just type a blank line before going on to the next code definition, i.e.:

b
27 45 10
27 45 11
r

Re:Port newsletter

c
27 (s10H
27 (s16H

If you come up with a PRINTER.SET file that you think

other Re:Port readers might be interested in sharing, send it in, and we'll put it on the next newsletter's disk.

Please be sure to include your name along with the specific brand name and model number of the printer that we will be able to tell users which file to use with which printer. We'll also give you full author's credit.

PBASIC

Continued from Page 4

.PGC file called filename.PGC so that it can be imported to other applications. Enjoy!

```
' WKSPL0T by BJ Gleason
' Plot a column from a spreadsheet
dim y(80)
oldscr=screen
Input "SpreadSheet File";wks$
print "Range can only be one-
dimensional"
print "Cols A-Z, Rows must be 2 digits"
Input "Range i.e., A01.A80 ";rc$ :
rc$=ucase$(rc$)
cs=asc(mid$(rc$,1,1))-65
ce=asc(mid$(rc$,5,1))-65
rs=val(mid$(rc$,2,2))-1
re=val(mid$(rc$,6,2))-1
if cs=ce then
```

```
rc=true
j=cs
n=re-rs
else
rc=false
j=rs
n=ce-cs
endif
Input "Bar or XY ";type$
for i=0 to n if rc then
y(i)=wksread(wks$,i+rs,j)
else
y(i)=wksread(wks$,j,i+rs)
endif
if i=0 then high=y(i) : low=y(i)
if y(i) > high then high=y(i)
if y(i) < low then low=y(i)
print y(i),
next i
```

```
screen 6
p=240/(n+1); w=p-2; h=62/high
if type$ = "B" or type$ = "b" then
for i=0 to n step 2
line(i*p,63)-(i*p+w,63-y(i)*h),1,BF
next i
for i=1 to n step 2
line(i*p,63)-(i*p+w,63-y(i)*h),1,B
next i
else
for i=1 to n
line((i-1)*p,63-y(i-1)*h)-(i*p,63-
y(i)*h),1
next i
endif
pgsave wks$: 'save as PGC file
wait
screen oldscr
```

Beginner

Continued from Page 9

jobs, and therefore you will have less memory free for other programs.

The bottom line, then, is the bottom line (of CHKDSK). This shows how much free memory you have to activate a program. If a program needs more than this, you will get a MEMORY FULL message. At this point, you may lower the size of your C: drive, or buy a memory expansion.

On an unexpanded Portfolio with an 8K C: drive and no other programs active, you can get 102.3K of memory. So at best, you'll only get 80 percent of that advertised 128K of memory.

What happens when you add a RAM card? Almost nothing. Your amount of free memory will still be the same.

What does change is the amount of storage space that you have. You can store programs and data onto the RAM card as much as you want

without reducing the amount of memory on your Portfolio. (Think of it as a very large shed at the back of the house. As you get new things, store them in the shed, and you can still move around in the house).

Of course, this does add the potential to gain more memory. You can take everything that you were storing on the C: drive (the house) and move it onto the A: drive RAM card (the shed). Then, you can reduce the C: drive to 8K and get the most memory you can.

What it all boils down to is this: How active are you? Do you use your Portfolio mostly to store information, or do you use it to run programs? If so, what programs do you run?

Here are the Re:Port recommendations for memory and storage space.

If all you do is run the internal programs, set your C: drive to 40K

(fdisk 40). This will give you the maximum amount of storage space on drive C: without sacrificing any room for the active memory of the built-in programs. Setting C: any higher will reduce the size of the largest file you can work on in the built-in programs; setting it lower is a waste, because the built-in programs have a limit on the amount of active memory they can use. You should have at least one 64K card to keep backups of all your data. To make a backup (and you should every day), insert RAM card and type COPY C:.* A: from the DOS prompt.

If you run any external programs, like the programs on the Re:Port disks, set your C: drive to 8K (fdisk 8). You should have at least a 128K card, and perhaps a 524K FlashRAM card to store all of your programs and data. If possible, do not keep anything on the C: drive.

Advanced

Continued from Page 10

matches the name that your program will set.

The first line of each help file should say, "Press ESC to exit" to remind the user how to get back into your program.

5. Inform your user that help is available by pressing Atari-E. You may worry that the user can change your help files.

After all, they will be going into an editor, not a file viewer.

But that is fine; this way, the user can make notes to refer to later, making the help system fit the particular user, much like scribbling notes in the margin of a user's manual.

PBASE

Continued from Page 1

1. You are unable to edit a database once you define it.

You must either live with your mistake or start anew.

The documentation does a very good job of warning you about this, though, and teaching you how to plan ahead.

2. Its sorting and importing features are quite slow, but this is more the fault of the limited memory and speed of the Portfolio.

Otherwise, PBASE is quite capable.

With it, you may define a database of up to 25 fields.

Each field may be either character (letters and numbers), integer (a whole number from 0 to 2,000,000,000), or float (a real number from -345,500,000 to 345,500,000).

PBASE can convert the generic "numeric" field of most databases into either integer or float during its import routine.

Note that there are no fields for tallying numbers or other math-

ematical functions.

You can do math in reports, however.

Also note that although you cannot change the definition of a database short of rewriting it entirely, PBASE is able to add, remove, modify, or print any record within the database quite easily.

Mostly, you will want to use PBASE to track clients in a more organized way than you can with Address Book.

For instance, you can use PBASE to filter out only your clients in a single state and print mailing labels for them.

Or, you can find the number of suppliers from which you have purchased more than \$50,000 worth of parts, or perhaps less than \$50,000, or any other number.

PBASE has a large range of reporting features, allowing you to select titles of fields, the width of columns, whether to total a column, and other options.

It also will let you do some math-

ematical functions, so you can see a printed report (assuming you have a printer with you on the road) that does all the math for you.

For instance, if you have a field with "total ordered" and another with "price each," you can create a report that generates the total cost of each item and tallies the overall cost of the order.

The manual for the software explains all of this very well, and even takes you through an example database that is easy to set up and understand.

It hits the major points of the program and encourages you to experiment from that point.

In general, PBASE is an excellent tool for current desktop database users who need to take some of that functionality on the road.

If you have a desktop database, don't hesitate to purchase PBASE.

If you think you'd like to get into using a database, its manual provides good definitions and tutorials to help you get started.

Quick Tip: Pro Carrying Case

The Professional Carrying Case has a pouch behind the memory card slots that can hold up to two 3.5" disks comfortably. Keep a

blank disk in there along with a disk that has the parallel port transfer program FT.COM so you can back up on a remote computer easily.

Beginner's Column

The meaning of memory vs. storage space

First-time Portfolio users will often plug in their new 128K memory cards, then make the logical jump that they now have 256K of memory on their Portfolios.

This is an easy assumption to make, but it isn't quite true.

It can be confusing, because memory is called RAM, and 64K or 128K cards are called "memory cards" or "RAM cards."

This makes it very important to know the differences between memory and storage.

This can get quite complex because the Portfolio can use memory as storage.

Basically, any computer will deal with programs and data in two ways. They are placed in storage (a floppy disk, a RAM card, or a hard drive, for example) when they are not in use.

But when you begin to run a program, it is moved into memory, along with the data that it needs to run.

This is why a program that is only 50K on your disk may not run in 128K of memory -- it may need to work with 80K of data.

To make this all more clear, let's start with a plain Portfolio with no RAM cards, straight from the box.

The Portfolio comes with 128K of RAM memory.

This is memory that can be used by programs while they are running.

However, on the Portfolio, you have a drive C:, which is called a RAM drive.

This takes a chunk of your RAM memory (used for active programs and data) and turns it into storage

space (for inactive programs and data).

When the Portfolio is first turned on, the drive C: takes up 32K of space.

You can set this as low as 8K, or up to 80K in 8K increments (i.e. 8K, 16K, 24K, 32K, etc.) The higher the number, the more storage is available and the less memory is available.

Think of the Portfolio's memory as a house.

If you use very little of the house to store furniture, you have more room to be active. On the other hand, if most of your rooms are used as storage, you won't have much freedom to move around.

You can watch the relationship of the C: drive and free memory with the CHKDSK command.

At the DOS prompt, type CHKDSK <enter>. This displays five different numbers.

1. The total disk capacity of the current drive. C: in this case.
2. The number of bytes stored on the disk.
3. The amount of space still free on the disk.
4. The number of bytes in total memory (126976 on a regular Port).
5. The number of bytes free in memory.

This reveals a couple of interesting points.

First, #4, the total bytes of memory, shows only 126976 bytes, which is only 124K (126976 bytes divided by 1024 bytes per kilobyte = 124K).

Where did the other 4K go? The

screen!

The Portfolio screen has 4K of storage space in order, believe it or not, to be more compatible with a standard IBM 80 by 25 screen.

Still, that only amounts to about 2K of memory (80 times 25 = 2000, or 1.95K).

The other 2K is a sad waste -- on an IBM screen, another byte is stored with each character on the screen to determine what color it is, whether it is blinking or underlined, and other information.

Of course, none of this matters on the Portfolio.

But that 4K is a small drop compared with another bit of missing memory.

Because the C: drive comes from a piece of total memory, you might think that if you subtracted line 1 from line 4, you would end up with line 5 (total memory minus total disk space on C: equals total free memory).

Wrong! You may find that up to 19K of memory is missing when you try this calculation.

This memory is gone to DOS, the operating system that keeps the Portfolio alive. It is active at all times on the Portfolio.

Actually, 19K is a small price to pay for DOS. It is higher on some other systems.

Depending on your Portfolio setup, you may notice even more than 19K is missing.

Some programs such as UPDATE.COM that run in your AUTOEXEC.BAT file stay active in memory at all times to do their

Continued on Page 9

Advanced Programming

Creating online, context-sensitive user help

One of the current trends in software design is online, context-sensitive help.

Users can basically ask for help at any time, and the computer will respond with the appropriate information, saving time from having to search through manuals.

Context-sensitive help not only helps the user, but it helps the programmer as well because it can cut down on time spent on support.

Believe it or not, creating context-sensitive help is possible on the Portfolio, thanks to the built-in Editor program and the PERMDATA.DAT file.

PERMDATA.DAT is a file that contains loads of useful information that the internal programs use to determine many things.

One of the most important details hidden in the PERMDATA.DAT file is the name of the last-used file in each application.

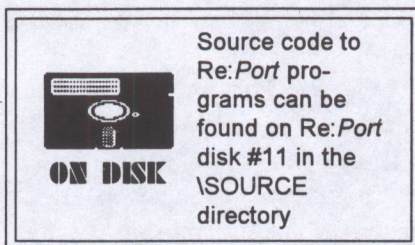
Knowing how to change this file name to another file name is the secret to context-sensitive help.

First, some background and tips on the PERMDATA.DAT file. PERMDATA is stored in the C:\SYSTEM directory.

However, it is not always there. After an FDISK or any other event that erases the C: drive, PERMDATA.DAT is not automatically created.

Instead, it is created after the user enters and exits a built-in program.

Because of that, do not assume that every Port has a



PERMDATA.DAT file.

A good program will check to see if it is there first, and if not, it will place its copy onto the C: drive.

PERMDATA.DAT contains 730 bytes of information.

It is very important that you do not change the length of the file.

Also, you should change only the information that you need to change and leave the rest alone.

It is always a good idea to have your program read the entire PERMDATA.DAT into memory, make your changes, and then write the whole file back to disk.

This way, you can ensure that none of the information will end up in the wrong place on the disk.

With that said, it is fairly simple to add whatever file name you wish to PERMDATA.DAT.

Adding a file name in the correct place will mean that when the user calls up that application, your file will be loaded automatically.

For instance, suppose your program places the file name A:\MYFILE.TXT (it is best to include the entire name, including the drive letter and directory structure) in the slot for the editor's name.

The next time the user hits Atari-E, MYFILE.TXT will load.

To place a file name into PERMDATA.DAT, you must first make sure your file name is null-terminated (ends with a 0 byte).

The filename can be up to xxx bytes long, including the trailing 0. Then, put it into the PERMDATA.DAT file in the following places:

Worksheet: Beginning at the 9th byte.

Dairy: Beginning at the 99th byte.

Editor: Beginning at the 183rd byte.

Address book: Beginning at the 273rd byte.

For context-sensitive help, you will focus mainly on the built-in Editor.

It is extremely simple, if you follow these steps:

1. Write a procedure (or take the procedure SETAPPPFILE from our Pascal source file EDITBX.PAS) that can set the name of the editor file.

2. Call that procedure at every point in your program for which you plan to offer context-sensitive help.

For instance, in a checkbook program, you may have a special help file set up for when your program goes into balancing mode.

3. Ensure that your program does not use too much memory.

Keep it as small as possible in order to allow popping up the built-in Editor.

4. Write the help files, making sure that the name of each file

Continued on Page 8

Online Services

New game available on CIS and GENie

Now available on both major online services for the Portfolio is Punk Jr., a great Pac Man clone for the Portfolio.

The game is fully graphical, and although it lacks the distinctive sounds of the original, it is a nice version for Portfolio gaming fans.

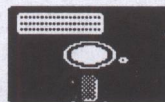
The author of the program also offers a board editor so you can create your own Punk Jr. mazes.

On GENie, the conversation has mostly focused on how to reboot a Portfolio and how to tell when rebooting won't work and it is time to send your computer back to Atari for an exchange.

Live, online discussions of the Portfolio continue with Re:Port editor David E. Stewart at 10 p.m. Eastern Time on Sunday nights.

CompuServe continues to offer many more interesting, active topics about the Portfolio.

For instance, you will find topics about programming the Portfolio as well as support for the BSE Universal Interface. Also online is the Mark Reeves with support for the Optrol 524K FlashRAM card.



ON DISK

Catalogs of the new files available on CompuServe and GENie are available on your Re:Port Disk #11 in the \ONLINE directory.

CompuServe wants all Re:Port readers who aren't members to sign up now, so they've put forward a special offer to our subscribers.

You can get a sign-up kit and \$15 worth of free connect time by calling (800) 848-8199 (ask for Operator 198). Tell them that you heard about this from Re:Port, an APORTFOLIO forum member.

Don Thomas from Atari is constantly online with offers for Portfolio users.

Recently, he announced that Atari "Fuji" logo patches were available free to CompuServe users.

He also has offered to put CompuServe Portfolio users on a waiting list for the new Atari game unit, the Jaguar. This is a unique opportunity to get the game if you don't happen to live in New York or San Francisco this year.

Contest

Play Peg Game for serious chance at serial port

The winner of our last contest is Jack Drury of Sarnac Lake, NY. He wins a copy of Terminal+ from Autobyte Software. Congratulations!

This time, let's change the rules on the contests a bit. We would like to see how many people are able to solve the Peg Game included in this issue. We've hidden a special code which will reveal itself when you win the game. Write that code down and send it to:

Re:Port Contest #11

P.O. Box 95691

Atlanta, GA 30347

The winner will be drawn at random from the correct entries. If no one is able to solve the puzzle, then the prize will be given to one of our readers at random.

Re:Port Contest #11

Name: _____

Secret code in Peg Game: _____

Favorite application (pick two):

Editor	Worksheet	Address Book
Diary	Calculator	

The prize this time is a serial interface. Winning the game will increase your chances of winning the interface dramatically, so start playing!

Re:Port Classifieds

Portfolio for Sale, Asking Half-Price

Item	Cost	1/2 Price
Portfolio with File Manager	299.95	149
Parallel Interface	49.95	25
Serial Interface	79.95	40
64K Card	99.95	49
AC Adapter	12.95	6.5
Padded Carrying Case	39.95	20
PC Card Drive	99.95	50
Complete Guide to the Port	17.95	9
Wirebound Port Guide	12.95	6.5

Atari Transfer Software 79.99 40
 Re:Port's first 6 issues 50.00 25
 w/software
 Call Ed Parra.
 1-818-442-7852 evenings; 1-818-401-8804 pager.

Portfolio for Sale

Brand new Portfolio, serial interface, 128K memory card and AC adapter.
 Paid \$600. Sell all or part, make an offer. 1-602-497-3862.

Making Hook Files Work

Here is a troubleshooter's guide to getting .HOO files to work.

Programs such as SPRINT.HOO in this issue are regular programs that have ties into the built-in editor.

To run them, you put them in the root (main) directory of the A: drive, bring up the built-in editor, and press the Fn-6 key combination.

A menu of the available .HOO files should appear. Select the program you want to run by moving the cursor to that filename and press enter.

If you can't get the program to run, take the following steps:

1. Make sure all the files that were included with the program are copied onto the A: drive in the main directory.

Some .HOO files have other data files that they expect to find if they are to run correctly.

For example, the program SPRINT.HOO will not run unless it finds the companion file PRINTER.SET.

Copy every file that the documentation requires into the root (main) directory of the A: card. If you issue the commands A:, CD \, and DIR, you should see your files.

2. Make sure that all requirements for running the hook file are met.

If the hook program is going to use the printer, for example, make sure that your printer is actually connected, turned on, and online. Super Print will actually warn you if you are working with a serial printer, because it will only work with a parallel port printer at

this time.

3. Do not run the .HOO file as a program outside the Editor.

.HOO files are actually just .EXE files in disguise. You may rename them to .EXE and run them, but because they most likely have special commands that will only work within the editor, do not attempt this unless the documentation explicitly says that you may.

4. Check your CONFIG.SYS file for the BUFFERS= line.

If the program still doesn't run, it should be giving you an error that reads "Failed to run program." If that is the case, first try editing the file CONFIG.SYS on your C: drive. If this file contains a line that says BUFFERS= and a number, delete this line and reboot the Portfolio.

Try running the .HOO file again.

5. Free more memory for the .HOO program by lowering the size of your C: drive.

If the program still won't run, backup all the files on your C: drive.

Then issue the FDISK command to reduce the size of your C: drive, which will in turn expand the memory that is available to the .HOO files. Suggested C: drive size for people who run .HOO files often is 8K. So, if you issue the command FDISK 8, you should be all set to run .HOO files.

If these steps don't work for you, contact Re:Port, and we will help you get the programs up and running right away.